

CLAIM AMENDMENTS

Please cancel claims 4, 5, 22, 32, and 41-48, without prejudice.

1. (Currently Amended) A negatively charged microporous membrane comprising a porous substrate and a crosslinked coating, wherein the crosslinked coating is prepared from a solution comprising a polysaccharide and an anionic polymer, the anionic polymer being obtained by polymerizing a mixture comprising an unsaturated monomer having a negatively charged group, a hydrophilic non-ionic unsaturated monomer, and at least one or more N-(hydroxyalkyl)- or N-(alkoxyalkyl)- acrylamide monomers, wherein the crosslinked coating comprises amide-ester and amide-amide crosslinks.
2. (Original) The negatively charged microporous membrane of claim 1, wherein the hydrophilic non-ionic unsaturated monomer is an acrylic monomer.
3. (Previously Presented) The negatively charged microporous membrane of claim 1, wherein the N-(hydroxyalkyl)- or N-(alkoxyalkyl)- acrylamide includes an alkyl group of 4 carbon atoms or less.
4. (Canceled)
5. (Canceled)
6. (Previously Presented) The negatively charged microporous membrane of claim 1, wherein said negatively charged group is a sulfonic or carboxylic acid.
7. (Currently Amended) The negatively charged microporous membrane of claim 2, wherein said acrylic monomer is an acrylate ester or acrylamide.
8. (Original) The negatively charged microporous membrane of claim 7, wherein said acrylic monomer is an acrylamide.
9. (Original) The negatively charged microporous membrane of claim 8, wherein said acrylamide is an alkylacrylamide.

10. (Original) The negatively charged microporous membrane of claim 9, wherein said acrylamide has a sulfonic acid group.

11. (Original) The negatively charged microporous membrane of claim 10, wherein said acrylamide is acrylamido-N-alkylsulfonic acid.

12. (Original) The negatively charged microporous membrane of claim 9, wherein said alkylacrylamide has a carboxylic acid group.

13. (Original) The negatively charged microporous membrane of claim 12, wherein said polymer includes a further acrylic monomer having a carboxylic acid group.

14. (Original) The negatively charged microporous membrane of claim 13, wherein said further acrylic monomer is an acrylate.

15. (Original) The negatively charged microporous membrane of claim 14, wherein said acrylate is β -carboxyethyl acrylate.

16. (Currently Amended) The negatively charged microporous membrane of claim ~~4~~ 2, wherein said acrylic monomer is a hydroxyacrylic monomer.

17. (Original) The negatively charged microporous membrane of claim 16, wherein said hydroxyacrylic monomer is a hydroxyacrylamide or an hydroxyacrylate.

18. (Previously Presented) The negatively charged microporous membrane of claim 1, wherein said polymer includes an N-(alkoxymethyl) acrylamide.

19. (Currently Amended) The negatively charged microporous membrane of claim ~~5~~ 1, wherein said polysaccharide is dextran.

20. (Original) The negatively charged microporous membrane of claim 1, wherein the polymer comprising an unsaturated monomer having a negatively charged group, a hydrophilic non-ionic unsaturated monomer, and at least one or more N-(hydroxyalkyl)- or N-(alkoxyalkyl)- acrylamide is prepared by employing a free radical initiator.

21. (Previously Presented) The negatively charged microporous membrane of claim 1 having a dynamic protein binding capacity of about 25 mg/ml lysozyme or more.

22. (Canceled)

23. (Currently Amended) The negatively charged microporous membrane of claim 1, wherein said porous substrate comprises a ~~substrate~~ polymer.

24. (Original) The negatively charged microporous membrane of claim 23, wherein said substrate polymer is selected from the group consisting of polyaromatics, polysulfones, polyolefins, polystyrenes, polyamides, polyimides, cellulose acetates, cellulose nitrates, polycarbonates, polyesters, and fluoropolymers.

25. (Original) The negatively charged microporous membrane of claim 24, wherein said substrate polymer is a polysulfone.

26. (Previously Presented) The negatively charged microporous membrane of claim 1, wherein said porous substrate is hydrophilic.

27. (Currently Amended) A process for preparing a negatively charged microporous membrane comprising a porous substrate and a crosslinked coating having negatively charged groups, the process comprising:

- (a) providing a porous substrate;
- (b) contacting said substrate with a solution comprising a polysaccharide and an anionic polymer, the anionic polymer being obtained by polymerizing a mixture polymer comprising an unsaturated monomer having a negatively charged group, a hydrophilic non-ionic unsaturated monomer, and at least one or more of a N-(hydroxyalkyl)- or N-(alkoxyalkyl)-acrylamide;
- (c) curing the substrate obtained in (b) to obtain the negatively charged microporous membrane; and
- (d) optionally, extracting the membrane obtained in (c) to remove extractable residue therein.

28. (Currently Amended) A process for preparing a negatively charged microporous membrane comprising a porous substrate and a crosslinked coating having negatively charged groups, the process comprising:

- (a) providing a porous substrate;
- (b) contacting said substrate with a solution comprising a polysaccharide and ~~a~~ an anionic polymer, the anionic polymer being obtained by polymerizing a mixture comprising an unsaturated monomer having a negatively charged group and an N-(hydroxymethyl)- or N-(alkoxymethyl)- acrylamide;
- (c) curing the substrate obtained in (b) to obtain the negatively charged microporous membrane; and
- (d) optionally, extracting the membrane obtained in (c) to remove extractable residue therein.

29. (Previously Presented) The process of claim 27, wherein said negatively charged group is a sulfonic or carboxylic acid.

30. (Previously Presented) The process of claim 27, wherein said unsaturated monomer having a negatively charged group is an acrylic monomer having a sulfonic or carboxylic acid group.

31. (Original) The process of claim 30, wherein said acrylic monomer having a sulfonic or carboxylic acid group is an acrylate or an acrylamide.

32. (Canceled)

33. (Currently Amended) The process of claim 27, wherein said porous substrate comprises a ~~substrate~~ polymer.

34. (Previously Presented) The negatively charged microporous membrane prepared by the process of claim 27.

35. (Previously Presented) A device comprising the negatively charged microporous membrane of claim 1.

36. (Previously Presented) A process for separating positively charged material from a fluid, said process comprising placing said fluid in contact with the negatively charged microporous membrane of claim 1 so as to adsorb the positively charged material to said membrane.

37. (Currently Amended) The process of claim 36, wherein said positively charged material is a ~~biomolecule~~ a protein, a polypeptide, an amino acid, a nucleic acid, or a combination of any thereof.

38. (Previously Presented) A process for transferring biomolecules from an electrophoresis gel comprising contacting said electrophoresis gel with a membrane of claim 1 and transferring the biomolecules to the membrane.

39. (Original) The process of claim 38, wherein said biomolecule is selected from the group consisting of proteins, polypeptides, amino acids, and nucleic acids, and combinations thereof.

40. (Previously Presented) The process of claim 38, further including recovering the positively charged material adsorbed on the membrane.

Claims 41-48. (Canceled)

Add the following new claims 49-51:

49. (New) The negatively charged microporous membrane of claim 1, wherein the crosslinked coating is prepared from a solution comprising about 0.1% to about 15% w/w of the polymer.

50. (New) The negatively charged microporous membrane of claim 1, wherein the crosslinked coating is prepared from a solution comprising about 0.1% to about 15% w/w of the polymer and the polysaccharide.

51. (New) The negatively charged microporous membrane of claim 19, wherein the crosslinked coating is prepared from a solution comprising about 0.1% to about 15% w/w of the polymer and dextran.